



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,176	10/03/2003	Andrew Ording	7394-0032	2296

7590 02/01/2006

E. VICTOR INDIANO  
INDIANO, VAUGHAN ROBERTS & FILOMENA, P.A.  
SUITE 850  
ONE NORTH PENNSYLVANIA STREET  
INDIANAPOLIS, IN 46204

EXAMINER

BELLINGER, JASON R

ART UNIT

PAPER NUMBER

3617

DATE MAILED: 02/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Interview Summary</b>	Application No. 10/679,176	Applicant(s) ORDING ET AL.	
	Examiner Jason R. Bellinger	Art Unit 3617	

All participants (applicant, applicant's representative, PTO personnel):

- (1) Jason R. Bellinger. (3) \_\_\_\_\_  
 (2) Victor Indiano. (4) \_\_\_\_\_

Date of Interview: 26 January 2006.

Type: a) ☒ Telephonic b) ☐ Video Conference  
 c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.  
 If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: proposed claims 1-24.

Identification of prior art discussed: Huntzinger, Drews, Blood.

Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☒ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

  
 \_\_\_\_\_  
 Examiner's signature, if required

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Discussed the Applicant's proposed claims (attached). Applicant argued that Huntzinger lacks surface features, and that Drews (which was used to teach a wheel having surface features) actually had the surface features on the tire, not the wheel. Further consideration of the Drews reference would be required. Also discussed that Drews shows flutes, which are not "closed plane profiles". The Blood reference however was used to teach the shape of the profiles. Further discussed the added limitation that the wheel is made of carbon fiber, and that the Huntzinger wheel is disclosed as weighing approximately 4 pounds, which the Applicant infers that the Huntzinger wheel is steel. Further consideration would be required. Discussed that new claim 24 is drawn to a non-elected species and would be subject to being removed from consideration.

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

#### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

**FAX COVER SHEET**

INDIANO VAUGHAN & LLP,  
ONE NORTH PENNSYLVANIA STREET  
SUITE 850  
INDIANAPOLIS, INDIANA 46204

PHONE: 317-822-0033

FAX: 317-822-0055

E. Victor Indiano

e-mail [Vic@IPLawIndiana.com](mailto:Vic@IPLawIndiana.com)

**CONFIDENTIALITY NOTICE:** The materials enclosed with this facsimile transmission are private and confidential and are the property of the sender. The information contained in the material is privileged and is intended only for the use of the individual(s) or entity(ies) named below. If you are not the intended recipient, be advised that any unauthorized disclosure, copying, distributing or the taking of any action in reliance on the contents of this telecopying information is strictly prohibited. If you have received this facsimile transmission in error, please immediately notify us by telephone to arrange for return of the forwarded documents to us.

DATE: JANUARY 24, 2006 (10:22AM)

**PATENT APPLICATION**

Applicant: ORDING et al.  
Serial No.: 10/679,176  
Filing Date: 03 October 2003  
Title: AERODYNAMIC SURFACED  
BICYCLE WHEEL  
Group: 3617  
Examiner: Bellinger, Jason R.,  
Atty Docket No.: 7394-0032

Mail Stop Fee Amendment  
Assistant Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

**Certificate of Facsimile Mailing Under Section 1.6(d)**  
I hereby certify that this correspondence (along with any paper referred to as being attached or enclosed) is being transmitted to the Patent and Trademark Office via facsimile to facsimile number 571-273-6680, on the date set forth

Date: 24 Jan 2006

Signature: [Signature]

**Deposit Account:**

The Commissioner is hereby authorized to deduct any defect or deficiency in fee, or credit any overpayment to Deposit Account No. 50-1590.

**Customer Number: 000031425**

**10 Pages**

cc: Andy Ording (317) 243-3879

W:\Word Processing\7394 - Compositech\32 - Fax Transmittal sheet to PTO on 24 Jan 06.wpd

**INDIANO VAUGHAN LLP**

ONE NORTH PENNSYLVANIA STREET, SUITE 500  
INDIANAPOLIS, INDIANA 46204  
PHONE 317-622-0033; FAX 317-622-0055  
E-MAIL VIC@IPLAWINDIANA.COM

**PATENT APPLICATION**

**Applicant:** ORDING et al.  
**Serial No.:** 10/679,176  
**Filing Date:** 03 October 2003  
**Title:** AERODYNAMIC SURFACED  
BICYCLE WHEEL  
**Group:** 3617  
**Examiner:** Bellinger, Jason R..  
**Atty Docket No.:** 7394-0032

Mail Stop Fee Amendment  
Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Certificate of Facsimile Mailing Under Section 1.6(d)**  
I hereby certify that this correspondence (along with any  
paper referred to as being attached or enclosed) is being  
transmitted to the Patent and Trademark Office via  
facsimile to facsimile number 571-273-6680, on the date  
set forth

**Date:** 24 January 2006  
**Signature:** [Signature]

**Deposit Account:**  
The Commissioner is hereby authorized to deduct any  
defect or deficiency in fee, or credit any overpayment  
to Deposit Account No. 50-1590.

**Customer Number:** 000031425

**PROPOSED CLAIMS FOR DISCUSSION WITH EXAMINER ON**

**26 JANUARY 2006 AT 2:00 P.M. TELEPHONIC CONFERENCE**

**RESPONSE TO OFFICIAL ACTION UNDER 37 CFR SECTION 1.111**

Dear Sir:

In response to the official action of 07 September 2005, the Applicant respectfully  
requests entry of the following amendment.

**In the Claims**

Please amend claims 2, 3 and 6 as follows.

Please add new claim 24.

1. (Previously Amended) A human powered vehicle wheel comprising:
  - a tire engaging portion located at the outward perimeter of the wheel;
  - an inner portion located radially inward from said tire engaging portion;
  - a first air engaging side surface extending radially between said inner portion and said tire engaging portion forming a first side of the wheel; and
  - a second air engaging side surface extending radially between said inner portion and said tire engaging portion forming a second side of the wheel which is axially opposed to said first side of the wheel;wherein said first and second air engaging side surfaces contain a plurality of surface features designed to create a turbulent boundary layer when the wheel travels through air to reduce aerodynamic drag.
2. (Twice Amended) The human powered vehicle wheel of claim 1, wherein said ~~inner portion~~ is a hub human powered vehicle wheel comprises at least one of a bicycle wheel and a wheel chair wheel.
3. (Twice Amended) The human powered vehicle wheel of claim 2, wherein said inner portion is a hub and said hub is a separately fabricated from said first and second air engaging side

surfaces, and said hub is connected at the center of said first and second air engaging side surfaces.

4. (Previously Twice Amended) A human powered vehicle wheel comprising:
- a tire engaging portion located at the outward perimeter of the wheel;
  - an inner portion located radially inward from said tire engaging portion;
  - a first air engaging side surface extending radially between said inner portion and said tire engaging portion forming a first side of the wheel; and
  - a second air engaging side surface extending radially between said inner portion and said tire engaging portion forming a second side of the wheel which is axially opposed to said first side of the wheel;
- wherein said first and second air engaging side surfaces contain a plurality of surface features designed to create a turbulent boundary layer when the wheel travels through air to reduce aerodynamic drag and a washer shaped brake engaging portion adjacent to said tire engaging portion.

5. (Previously Amended) The human powered vehicle wheel of claim 4, wherein said brake engaging portion and said tire engaging portion are separately fabricated from said first and second air engaging side surfaces, and said brake engaging portion and said tire engaging portion are connected at the outward perimeter of said first and second air engaging side surfaces.

6. (Twice Amended) The human powered vehicle wheel of claim 1, wherein said inner portion



*wheel*  
~~contains a plurality of surface features~~ which comprises a wheel composed at least partially of carbon fiber material.

7. (Withdrawn - Previously twice amended) The human powered vehicle wheel of claim 4, wherein said plurality of surface features are multi-sided polygonally shaped depressions.
8. (Withdrawn - Previously Amended) The human powered vehicle wheel of claim 7, wherein said multi-sided polygonally shaped surface features are of multiple diameters.
9. (Withdrawn - Previously Amended) The human powered vehicle wheel of claim 8, wherein the diameters of said multi-sided polygonally shaped surface features range from 0.2 – 0.4 inches.
10. (Withdrawn - Previously Amended) The human powered vehicle wheel of claim 7, wherein said multi-sided polygonally shaped surface features are arranged in a first pattern in a first zone, and a second pattern in a second zone radially outward from said first zone.
11. (Withdrawn - Previously Amended) The human powered vehicle wheel of claim 10, wherein the density of surface features in the second zone is greater than the density of surface features in the first zone.
12. (Withdrawn - Previously Amended)) The human powered vehicle wheel of claim 10,

wherein the number of surface features in a washer shaped section of a fixed width in the first zone is less than the number of surface features in a washer shaped section of the same fixed width in the second zone

13. (Withdrawn - Previously twice Amended) The human powered vehicle wheel of claim 4, wherein said plurality of surface features are radially extending surface features.

14. (Cancelled)

15. (Withdrawn - Previously Amended) The human powered vehicle wheel of claim 13, wherein said radially extending surface features have multiple shapes and multiple radial extents.

16. (Previously Amended) The human powered vehicle wheel of claim 1, wherein said surface features are protrusions from said air engaging side surfaces.

17. (Previously Amended) The human powered vehicle wheel of claim 1, wherein the wheel is disc shaped.

18. (Previously Amended) The human powered vehicle wheel of claim 1, further comprising a valve stem receiving aperture.

19. (Previously Amended) The human powered vehicle wheel of claim 1, wherein said plurality of surface features are designed such that when said wheel moves through a body of air, the boundary layer separates from said first and second air engaging side surfaces closer to the trailing edge of the wheel than the boundary layer would separate from a wheel without surface features.

20. (Previously Amended) The human powered vehicle wheel of claim 1, wherein said plurality of surface features are circular shaped depressions.

21. (Previously Amended) A human powered vehicle wheel comprising:

a hub located at the center of the wheel;

a tire engaging portion located at the outward perimeter of the wheel;

a first air engaging side surface extending radially between said hub and said tire engaging portion forming a first side of the wheel having a brake engaging portion adjacent to the tire engaging portion; and

a second air engaging side surface extending radially between said hub and said tire engaging portion forming a second side of the wheel which is axially opposed to said first side of the wheel having a brake engaging portion adjacent to the tire engaging portion;

wherein said first and second air engaging side surfaces contain a plurality of surface features designed such that when said wheel moves through a body of air, the boundary layer separates from said first and second air engaging side surfaces closer to the trailing edge of the wheel than the boundary layer would separate from a wheel without surface features.

22. (Previously Added) A human powered vehicle wheel comprising:
- a tire engaging portion located at the outward perimeter of the wheel;
  - an inner portion located radially inward from said tire engaging portion;
  - a first air engaging side surface extending radially between said inner portion and said tire engaging portion forming a first side of the wheel; and
  - a second air engaging side surface extending radially between said inner portion and said tire engaging portion forming a second side of the wheel which is axially opposed to said first side of the wheel;
- wherein said first and second air engaging side surfaces contain a plurality of surface features having closed plane figure profiles designed to create a turbulent boundary layer when the wheel travels through air to reduce aerodynamic drag.

23. (Previously Added) The human powered vehicle wheel of claim 22, wherein said plurality of surface features are circular shaped depressions having a depth of between about 0.2 and 0.4 inches.

24. (Newly Added) The human powered vehicle wheel of Claim 22 wherein said plurality of surface features are polygonally-shaped depressions.

**REMARKS**

The Applicant looks forward to having this opportunity to discuss the above-proposed claim with the Examiner on Thursday, 26 January 2006 at 2:00 p.m.

**Extension of Time**


Applicants believe that an extension of time for two (2) months is required for this response, and Applicants hereby request an Extension of Time for this time period or whatever time period is appropriate. **E. Victor Indiano's Deposit Account 50-1950** may be charged if the appropriate amount is not attached herewith

**Conclusion**

The Applicants believe that their claims patentably distinguish the art of record. Re-examination and re-consideration, culminating in allowance of all claims in the application is therefor respectfully requested. If the Examiner has any questions relating to the instant application, he is respectfully requested to contact the Applicants' attorney, E. Victor Indiano at (317) 822-0033; or by e-mail at [Vic@IPLawIndiana.com](mailto:Vic@IPLawIndiana.com).

Applicant requests that any required fees needed beyond those submitted with this Response be charged, or any overpayments be credited to the Deposit Account of E. Victor Indiano, **Deposit Account Number 50-1590**.

Respectfully submitted,  
Compositech, Inc.

  
By: E. Victor Indiano, Its Attorney  
Reg. No. 30,143

32 - Response to official action of 07 September 2005.wpd

ORDING et al. Serial No.: 10/679,176

Page 8 of 8

23 January 2006